

**BUREAU OF WASTE PREVENTION  
DIVISION OF CONSUMER AND TRANSPORTATION PROGRAMS**

**Summary of Comments and Response to Comments  
on the Proposed Amendments to 310 CMR 7.38**

**310 CMR 7.38:**

**Certification of Tunnel Ventilation Systems in the Metropolitan Boston  
Air Pollution Control District**

December 2005

## I. Summary of Comments and Response to Comments on 310 CMR 7.38

On July 19, 2005 the Department of Environmental Protection (DEP) held a public hearing in the DEP Boston Office to solicit comments on Technical Amendments to 310 CMR 7.38. The comment period ended at 5PM on Friday, July 29, 2005. Comments were received from:

- (1) Conservation Law Foundation, Carrie Schneider
- (2) Boston Environment Department, Bryan Glascock

Wherever possible comments are directly quoted for response. Otherwise the comments are summarized as appropriate. The full, original text of the comments, as submitted, are on file in DEP's Boston Office at One Winter Street, Boston MA 02108.

### 1. Comment

DEP should "require the most accurate monitoring under 310 CMR 7.38." (1)

### 1. Response

DEP agrees with this comment and the final regulations address this goal. The amendments to 310 CMR 7.38(8), Compliance Monitoring, contain a revised set of allowable techniques and emissions monitoring approaches. This revised "hybrid" approach to emission monitoring was made necessary by advances in tunnel ventilation technologies and became an option due to monitoring techniques developed and authorized since the regulation was originally promulgated in the early 1990s. This approach will allow more accurate monitoring of ambient emissions within the portal area environment than could be conducted with the original monitoring specifications. For example, the Part 60 stack monitoring approach originally included in the regulation cannot be used with longitudinally ventilated tunnel sections. In the absence of these revisions, it would not be possible to determine whether violations occur in longitudinally ventilated tunnel sections.

### 2. Comment

DEP should "remove the proposed revision to 310 CMR 7.38[(8)](a) that would allow the air emissions monitoring protocol to be revised with only prior written approval of EPA [sic], and which would defeat the otherwise applicable SIP revision process." (1)

### 2. Response

DEP disagrees with this comment, which suggests that revisions to an Air Emissions Monitoring Protocol constitute a revision of the Massachusetts State Implementation Plan (SIP), and therefore must go through the public review process required for a SIP revision. While the amendments to 310 CMR 7.38 will be submitted to the Environmental Protection Agency (EPA) as a revision to the SIP, the initial Protocol submittal and any subsequent modifications will be conducted pursuant to an approved SIP and will not require a SIP revision or EPA approval.

### 3. Comment

“A public hearing should be conducted on initial filings of Air Emissions Monitoring Protocols and on some modifications. ...The regulations should include some standard that indicates when” modifications to monitoring protocols trigger a public hearing. (2)

### 3. Response

A public hearing will be conducted for an initial Protocol as part of the Operating Certification requirements pursuant to 310 CMR 7.38(4). The public notice and hearing provisions in 310 CMR 7.38(5) require public notice and hearing on a regulated project's Operating Certification within 15 to 18 months after opening of the project roadway for general public use. An Operating Certification is required to demonstrate that the operation of the tunnel ventilation system is in strict accordance with the certification criteria. DEP considers such a demonstration to include the Protocol required by 310 CMR 7.38(8)(a). A public hearing will also be conducted for a Protocol submitted as part of the 5-year renewal of said Operating Certificate pursuant to 310 CMR 7.38(4)(c). Thus, initial Protocols and renewal Protocols will be subject of a public hearing.

While the commenter has not suggested which Protocol modifications should be subject to a public hearing, there are certainly monitoring changes that would qualify as major and would warrant public hearing. It is DEP's expectation that the Operating Certification to be issued under 310 CMR 7.38(4) and (5) would contain conditions limiting changes to monitoring. If monitoring changes were proposed by a regulated project that would require a change in the conditions of the Operating Certification, such a change would go through the same public review that the Operating Certification itself will go through. Alternatively, as indicated above, a regulated project could propose monitoring changes at the time of the 5-year renewal of the Operating Certification required by 310 CMR 7.38(4), which would be subject to public hearing.

DEP does not anticipate significant nor frequent modifications of a Protocol during the 5-year certification period. Though difficult to predict, some minor modifications, such as maintenance procedures and material substitution, may be necessary to refine and/or improve data collection from time to time during the 5-year period. Some such issues may require prompt action; others may not rise to a level of significance. Therefore, a public hearing will not be required for these types of situations. Rather, DEP will publish notice of any such minor modifications in the Environmental Monitor prior to their implementation.

### 4. Comment

“Both statistical and modeling approaches are valuable tools, but they can often contain subtle flaws. Public scrutiny is essential to help prevent errors and to increase acceptance. In this regard, it is essential that any protocol that includes these tools also include sufficient actual monitoring to provide on-going verification.” (2)

### 4. Response

DEP agrees that both statistical and modeling approaches are valuable tools. Statistical and modeling approaches in concert with monitoring will be used where appropriate to provide ongoing verification of compliance with emission standards and limits. The

statistical and modeling elements contained in the amendments to 310 CMR 7.38(8)(a) were developed where actual emissions monitoring was not feasible.

As detailed above in Response 2, after a regulated project submits an Operating Certificate pursuant to 310 CMR 7.38(4), a public hearing is required by 310 CMR 7.38(5). DEP will consider public comments submitted concerning the operating certification, statistical and modeling approaches, and actual monitoring data.

This comment made DEP aware of the need for one additional change in the final regulations to provide for consistency with the Technical Support Document's intent to allow a variety of acceptable monitoring approaches. The existing language of 310 CMR 7.38(4)(a) does not match the intent of the regulatory amendments. It states "Any operating certification shall demonstrate that the operation of the tunnel ventilation system shall, at a minimum, be in strict accordance with the certification criteria set forth in 310 CMR 7.38(2)(a) 1. through 3. and the certification accepted by the Department pursuant to 310 CMR 7.38(3) as demonstrated through actual measured emissions and traffic data." To ensure consistency throughout the regulations, DEP is finalizing the regulation language to add the following to the end of section 310 CMR 7.38(4)(a): "...or other approaches allowed by 310 CMR 7.38(8)(a)."

#### 5. Comment

We note that the word "continuous" has been removed from (8)(a) line six but remains in (9)(a)(1) line one and (9)(a)(2) line four. (2)

#### 5. Response

DEP acknowledges that the word "continuous" has been removed from (8)(a) line six but remains in (9)(a)(1) line one and (9)(a)(2) line four. The word was removed from 310 CMR (8)(a) because it not consistent with the hybrid emissions monitoring approach described in that paragraph. However, the word "continuous" remains in 310 CMR 7.38(9)(a) since continuous monitoring is one of the approaches to be used by regulated projects and this data is required to be reported to DEP.

#### 6. Comment

The commenter "fear[s] that this revision may lead to fewer recordings of air quality violations that are occurring." (1)

#### 6. Response

DEP does not believe this concern is justified. The revisions, which affect the compliance monitoring provisions in the regulation, are intended to address development of new ventilation technologies and advances in monitoring procedures. The revisions make it possible for regulated projects to demonstrate compliance, which the original procedures did not allow. For example, the Part 60 stack monitoring approach originally included in the regulation cannot be used with longitudinally ventilated tunnel sections. In the absence of these revisions, it would not be possible to determine whether violations occur in longitudinally ventilated tunnel sections. The revisions will not lead to fewer

recordings of air quality violations that occur, but, rather, will make it possible to determine whether air quality violations are occurring.

Another example of the need for the revisions is in determining compliance with the DEP NO<sub>2</sub> Guideline. The original Part 60 monitoring approach specifies how to measure concentrations in ventilation stacks, not at ambient locations to which DEP's NO<sub>2</sub> Guideline applies. The amendments being finalized allow statistical approaches that establish in-tunnel emissions levels sufficiently low to ensure that ambient locations maintain NO<sub>2</sub> levels below DEP's NO<sub>2</sub> Guideline. Again, the revisions will not lead to fewer recordings of air quality violations that occur, but, rather, will make it possible to determine whether air quality violations are occurring.

#### 7. Comment

"Accuracy in recording any violations should not be sacrificed for convenience or cost saving." (1)

#### 7. Response

DEP agrees with this comment. As expressed in Response 5, the amendments, which affect the compliance monitoring provisions in the regulation, are intended to address development of new ventilation technologies and advances in monitoring procedures. While DEP is sensitive to the public money spent on roadway projects and supports appropriate cost savings, cost saving was not the motivation for the amendments. The purpose of the amendments was to make it possible for regulated projects to gather data necessary to demonstrate compliance, which the current procedures do not allow.

#### 8. Comment

Certain transit mitigation projects, including the Red-Blue Connector, that were incorporated into Central Artery/Tunnel (CA/T) Project modeling assumptions may not be built, causing concern about air quality impacts. (1)

#### 8. Response

DEP agrees that the Red-Blue Connector was one of several transit projects conceived as mitigation either during construction or operation of the CA/T project and some of which were also included in the public transit network used in determining traffic forecasts. While CA/T modeling assumptions are not germane to these amendments, DEP notes the CA/T operating certification modeling to be submitted next year will be based on the actual transit network.